

MEETING HIGHLIGHTS
Hanford Site Technology Coordination Group
Management Council

November 18, 1998
EESB Snoqualmie Room
8:30 a.m.-12:00 p.m.

PURPOSE

- To get an update on the Hanford Tanks Initiative
- To begin reviewing the FY 1998 technology deployments, specifically for C-Reactor

AGENDA

UPDATES

Status of Actions from Last Month's Meeting – Short updates were given on action items being followed.

S&T Needs Process Improvements – The group met and is in the process of revising a letter which will go out to the contractors. The letter will describe the needs process for FY99. We are in the process of producing a CD-ROM, which will be ready for distribution in December.

Subgroup Oral Reports – Each Subgroup gave a short report.

Western Governors' Association Workshop – The Western Governors' Association is proposing to hold a regional technology deployment workshop at Hanford in May 1999 as part of the Interstate Technology and Regulatory Cooperation (ITRC) effort, involving participation of over 25 states. It was suggested that a committee be formed to plan the workshop.

STCG National Meeting – The STCG National Meeting was held last month in conjunction with the TIE Conference in Chicago. The STCGs are starting to band together to provide more consistent support.

Revitalization of the STCG – A couple of months ago, we had a session on the revitalization of the STCG. We have had several outside meetings to discuss the recommendations that came forward. We would like to set up an ad hoc meeting with the Subgroup leads to discuss the recommendations. Each STCG member should send in success statements for discussion at the January meeting.

EMSP at Hanford – Dave Robertson from the Environmental Management Science Program at INEEL was visiting Richland and gave a brief update on the program.

HANFORD TANKS INITIATIVE UPDATE

Cathy Louie reported that HTI is at a critical juncture, where a lot of preparatory work is required. They want to get a feeling from this group that HTI is still important. They would like any comments on the program and possibly a re-endorsement. Bill Root provided an update and presented an integration schedule that shows how HTI products integrate with the rest of the Hanford programs. A letter of endorsement was drafted at the meeting, and an endorsement vote was held. It passed unanimously.

FY 1998 TECHNOLOGY DEPLOYMENTS: C-REACTOR SUCCESS STORY

Shannon Saget said that she wanted to put a different twist on her presentation on the success of C-Reactor and came to talk about the journey they took that enabled them to be successful. Twenty technologies were demonstrated over a 21-month period, and thirteen were deployed. The project was planned with the idea that technology must be integrated from the planning phase through execution and closeout.

FUTURE AGENDA ITEMS

- AM of the Month -- Bob Rosselli
- Subgroup FY99 Work Plans
- FY99 Work Plan for the Management Council
- Progress in Meeting our S&T Needs
- WGA Presentation on Future Workshop
- STCG Image -- How Do We Define Success?
- TFA Annual Report Video
- Status Report on ITRD Project
- FDH Presentation on FY99 Technology Deployment Successes

MEETING REVIEW/WRAP-UP

The next meeting will be December 16, 1998 in the EESB Snoqualmie Room, 8:15 a.m. - 12:00 noon.

ACTION ITEMS

- Draft letter from MW Subgroup on MWFA not meeting our needs – Ellen Dagan
- Report from Rick Tomlinson on the ITRC Regional Deployment Workshop for the Western Governors' Association at the December meeting – Roger Collis

- Each STCG member should send definitions of “success” for the STCG. E-mail success statements to Dave Biancosino or Charlotte Blair.
- Subgroups report on their definitions of success in December.

**HANFORD SITE TECHNOLOGY COORDINATION GROUP
MANAGEMENT COUNCIL MEETING MINUTES**

**November 18, 1998
EESB Snoqualmie Room
8:30 a.m. - 12:00 p.m.**

INTRODUCTIONS/ANNOUNCEMENTS

Debbie Trader opened the meeting and introductions were made. Roger Collis introduced Sandy Smith from Pacific Rim Enterprise Center, who was attending for the first time.

UPDATES

Status of Actions from Last Month's Meeting

- John Murphy -- Place a call to HQ and/or the Focus Areas about ASTD funding for this FY.

John reported that, out of the \$27M in "plus-up" funding, only \$8.5M has been identified for ASTD. HQ will contact the Focus Areas this week to try to identify more ASTD funds, and will let us know the status next week.

- Ellen Dagan -- Draft a letter to the MWFA on their lack of response to our technology needs.

Per Steve Weakley, the Mixed Waste Subgroup will draft a letter. It should be ready for the Management Council to review in December.

- John Neath -- Modify transmittal letter for endorsement of S&T Workshop recommendations regarding incentives for contractors.

Dave Biancosino noted that the letter went out. HQ has received it, and they are working up a response. They have already included quite a few recommendations in their plan now, and they will be addressing each recommendation. Mike Barainca was invited to Hanford to tell us how HQ is responding to our letter.

S&T Needs Process Improvements -- Dennis Brown

The group met and is in the process of revising a letter that will go out from John Wagoner to the contractors and the AMs. The letter will describe the needs process for FY99. We are in the process of producing a CD-ROM, which will be ready for distribution in December.

Subgroup Oral Reports

Fred Serier (Subcon):

The FY98 Annual Report has been completed and endorsed by the Subcon Subgroup. Two new technology needs have been identified and will be submitted to the Management Council next month for their endorsement:

- Improved, Cost-Effective Methods for Subsurface Access to Support Characterization and Remediation
- Improved Methods for Determining Distribution of Beta-Emitting Contaminants in Subsurface Soils

Cathie Louie (Tanks):

The Tank Subgroup worked on their FY98 Annual Report and their FY99 Work Plan. They also had some brief updates from six Environmental Management Science Program (EMSP) principal investigators.

Dave Langstaff (D&D)

The D&D Subgroup's FY99 Work Plan is just about complete. Their FY98 Annual Report is complete. They had two technology presentations:

- BNFL reported on some of the technologies they had utilized.
- There were presentations and discussions with representatives of a group from Sandia on robotics/remote size reduction and decontamination of glove boxes. They are looking at expanding that work into other areas.

Steve Weakley (Mixed Waste)

The Mixed Waste Subgroup had two EMSP presentations. They would like to present WRAP technology deployments at a future Management Council meeting. They completed their FY98 Annual Report and worked on their FY99 Work Plan.

Western Governors' Association Workshop -- Roger Collis

The Western Governors' Association is proposing to hold a regional technology deployment workshop at Hanford in May 1999 as part of the Interstate Technology and Regulatory Cooperation (ITRC) effort, involving participation of over 25 states. The potential workshop at Hanford would be held in May (or thereabouts) in coordination with the STCG and INEEL. It's a northwestern technology workshop. In order to organize this well, things need to be in place by the end of the year. PREC would like the endorsement of the STCG.

It was suggested that a committee be formed to plan the workshop. Jerry White, Dave Langstaff, Terry Walton, and Nancy Uziemblo (in absentia) volunteered to be a part of the group. Nancy would like this to happen and would bring in other regulators. Rick Tomlinson will plan to give a presentation to the Management Council at December's meeting.

It was decided that it was too early to endorse the workshop, but there was an agreement to start exploring the possibility, and more information will be presented next month.

STCG National Meeting -- Dave Biancosino

The STCG National Meeting was held last month in conjunction with the TIE conference in Chicago. The TIE conference is an EM-40 activity that shares information among sites. There was a special session on D&D. Hanford had good representation.

Participants from all the STCGs across the Complex were at the STCG National Meeting. The purpose of the meeting was to get better alignment with the Focus Areas. The Subcon and D&D Leads were there, as well as representatives from Tanks and Mixed Waste. EMSP and Environmental Management Integration (EMI) representatives were also there.

The Focus Areas all indicated that they need our help. One of the things they have been combating is that there have been some questions on the value of the STCGs, since the Focus Areas are starting to go directly to the users themselves. How do the STCGs fit in with the User Steering Committees for the Focus Areas?

Another meeting will be held in the January/February time frame. The STCGs are starting to band together to provide more consistent support.

Revitalization of the STCG -- Dave Biancosino

Dave reviewed the history and progress of the STCG revitalization working group. A couple of months ago, we had a Management Council session on the revitalization of the STCG. We have had several outside meetings to discuss the recommendations that came forward from the Management Council.

First, the Management Council's recommendations were categorized as follows:

- Internal Communications
- External Communications
- Interface and Direction to Subgroups

We would like to set up an ad hoc group to focus on Interface and Direction to the Subgroups to discuss the Management Council recommendations. Gary Ballew and Debbie Trader volunteered to be in the group, along with the Subgroup Leads. John Murphy suggested that they include some project people.

Cathy Louie asked how the STCG Management Council measures success. Debbie said that the reason we set up this revitalization group was to figure out what we have to do to be successful. Jay Augustenborg thinks that we are a group in search of a mission. What value added (in terms of cleanup) do we provide? HQ considers us to be successful. Fred Serier asked how HQ could contribute to our success at the Site.

John Murphy stated that we need to understand Site problems and help the projects overcome barriers to technology deployment. Roger Collis said that success is what you can contribute and learn from meetings on a personal level.

Jay Augustenborg said we need to hear from all the member organizations what they want to get out of the STCG.

Doug Huston asked who our customers are and what their definition of success might be. His personal definition is that to be considered successful, the STCG should facilitate technology involvement in Hanford cleanup.

It was decided to ask each STCG member to send in two success statements. One would be the definition of success for the Hanford STCG, and the other would be the definition of success for each constituent's participation in the STCG. The Subgroup Leads will also be asked to provide statements. They should define what they must do to feel successful and what they need from the Management Council. The Facilitation Team will compile the responses for discussion at the January meeting.

Rick Brouns suggested that performance measures be included in the Subgroup Work Plans so at the end of the year, it's very easy to grade your performance. We need some tangible success measures to be used as a management tool to see if the STCG is being effective.

Debbie and Roger both made the point that each site is unique, and each STCG should evolve to meet the needs of their site.

EMSP Program at Hanford

Cathy Louie introduced Dave Robertson from the Environmental Management Science Program (EMSP) at INEEL. EMSP is a partnership between DOE's Office of Environmental Management (EM) and the Office of Science (SC) (formerly ER). The Office of Science runs the technical portion of the program.

Dave told the group that he was here doing a workshop with TFA this week to get the researchers tied in with the users to make sure we're targeting our research to where it's needed. Resources and attention to longer-term basic science research are needed to reduce cleanup costs and risks. The objectives are to develop strong ties with EM to ensure mission orientation, to carry out a competitive program with awards to national labs, universities and industry, and to facilitate integration of research results with other parts of DOE/EM and industry.

EMSP staff reviewed Hanford's HLW science needs and determined that there are EMSP projects supporting 24 out of 27 of the needs. This shows that the program is being successful at responding to site needs.

EM has asked for something to show the end-users. EMSP is developing an outline now, and the final report will be coming out this fall.

EMSP currently funds 235 research projects. More than \$15M will be available for a call for proposals going out in December, \$10M for vadose zone and \$5M for low-dose radiation basic research.

HANFORD TANKS INITIATIVE (HTI) UPDATE

Cathy Louie reported that HTI is at a critical juncture. It is very important to TWRS, but it's not urgent. TWRS wants to get a consensus from the Management Council that HTI is still important. They would like any comments on the program and a re-endorsement. Funding battles are raging pretty hard. EM-50 has come forward with their share, but it's uncertain if Hanford is going to come up with the EM-30 portion.

Bill Root, Informatics Corp.

HTI's mission is to deploy retrieval and characterization technologies for leaking tanks and establish retrieval criteria based on risk and cost.

Objectives:

- retrieve difficult-to-remove waste from a single-shell tank (SST)
- conduct industry-led waste heel removals
- build industry confidence for Phase II privatization
- establish retrieval performance criteria, and measure compliance
- characterize waste to meet risk/transport analysis objectives -- DQO set up for 1 tank
- complete by October 2001

HTI has three fundamental tracks:

- Site Characterization and Performance Assessment
- Demonstration Project
- Retrieval

They have an Integration Schedule that shows how HTI products integrate with the rest of the Hanford programs.

Retrieval Demonstration Accomplishments:

- Demonstrated four full-scale retrieval systems for retrieving waste from the SSTs
- Established a government-furnished information package of relevant work associated with retrieval on the Internet, available to all vendors for proposal preparation
- Successfully established a process for national labs to provide their services and expertise to industry on proposals to the government
- Awarded competing service contracts to two commercial vendors for the final retrieval of waste from C-106
- Awarded five contracts to industry for concepts/cost estimates of their commercial technologies that could be modified/adapted for enhancements to pit operations.

Retrieval Demonstration Look Ahead:

- Down select to one commercial vendor team for final waste retrieval of C-106
- Complete qualification test of vendor retrieval equipment. Complete site upgrades necessary to support vendor-supplied retrieval system

- Complete installation/testing/Operational Readiness Review
- Complete final retrieval of C-106

Characterization accomplishments have been made in the areas of AX-104 In-Tank Assessment and AX-104 Upper Vadose Zone Inventory Assessment.

Closure accomplishments:

- Issued draft retrieval performance evaluation methodology for AX tank farm (RPE report)
- Completed engineering studies to provide data for preparation of the RPE report

Closure Basis Look Ahead:

- Finalize retrieval performance evaluation methodology for AX tank farm report
- Update RPE report to include LDUA and cone penetrometer sample analysis data and additional uncertainty evaluations
- Identify a path forward for establishing acceptable end-state alternatives for future consideration
- Provide data to support future NEPA analyses of end-state alternatives
- Continued integration with other ongoing related Hanford Site activities (e.g., composite analysis)

Summary:

- The HTI base plan is still valid. The procurement process at Hanford is not an impediment at this time. There has been a very collaborative approach.
- Infrastructure and resources established for integrating technology demonstration/application into TWRS
- Technology application/demonstration must compete with risk/safety and regulatory compliance for resources.

Questions/Comments:

Cathy Louie acknowledged all the people who have done so much work. Help has come from the STCG Management Council, the regulators, and others to review documents, etc.

Gary Ballew asked why HTI is important. Cathy said that a lot of what we're doing now should have been done ten years ago. The NEPA process for closure needs to be defensible. We need to show the options and process for closure. There is a six-year lead time.

Wayne Martin asked where HTI falls on the Site's Integrated Priority List. Cathy said that it is on the line; those decisions are being made now. Jay Augustenborg added that funding right now is in a real state of flux. Jim Mecca said that there are a number of other projects competing for the funds. What you need to know is what the other competing projects are and where they fall on the IPL. Not knowing all the facts makes endorsing any one project almost impossible.

Gordon Rogers said that it raises the question once again of the competition of needs, like this one, which are not TPA milestones. Isn't it about time we are more contentious about our

milestones? Gordon asked if there are any activities in HTI that would directly affect a TWRS-level milestone. Bill Root said that the data feed into and support many Hanford projects.

Cathy said that the STCG could endorse the fact that HTI is still a value-added project. Such an endorsement could have an impact on the funding decision-makers.

John Murphy said there were two issues: (1) Does this group support the HTI technologies? (2) At what level of funding?

Jerry White said that the STCG couldn't totally respond to whether funding HTI is the right thing to do. We talked earlier about EM-50's response to our needs. In this case and in the Canyon Disposition Initiative (CDI) case, EM-50 has come to the table, but Hanford has not come forward with their portion of the funding. Also, if it's important and we've come this far, why can't we finish it?

Tom Anderson said that the STCG could add value by endorsing the project. Jay said that there are a lot of valuable projects out there, and HTI needs to be prioritized with the other projects. He would abstain from voting on the endorsement. John Murphy responded that we should all wear our STCG Council hats in this meeting. Outside the meeting, everyone can wear their Program hats.

Dave asked Cathy for a draft letter endorsing the project, to be shown to the group for a vote at the end of the meeting.

FY 1998 TECHNOLOGY DEPLOYMENTS: C-REACTOR SUCCESS STORY – Shannon Saget, DOE-RL

Shannon said that she wanted to put a different twist on her presentation on the success of C-Reactor and came to talk about the journey they took that enabled them to be successful.

Project Approach to Technology Deployment at Hanford

C-Reactor Interim Safe Storage (ISS) Objectives:

- Safe storage of reactor core up to 75 years
- Cannot preclude future D&D goals
- Reduce potential risk to employees
- Minimize releases to the environment
- Reduce surveillance and maintenance costs
- Establish model for the next seven reactors

Barriers encountered included risk, budget, cost, procurement, schedule, worker resistance, regulatory agreements, and the “not invented here” attitude.

Twenty technologies were demonstrated in 21 months. The project was planned with the idea that technology must be integrated from the planning phase through execution and closeout.

Technology Deployment Strategies that WORK!

- Identification of needs and performance specifications
- Integrated project team
- Integration of technology into scope, schedule, and budget
- Worker involvement
- Regulator and stakeholder involvement
- Phased procurement contract
- Collection of accurate cost and performance data
- Communication

Out of 20 technologies demonstrated, 13 were deployed.

Non-Hanford deployments:

- Position-Sensitive Radiation Detector
- STREAM
- Laser Assisted Ranging Data System
- 2-D Walker
- Wireless Remote Monitoring

All objectives were met. Both TPA milestones associated with C-Reactor were met. 260,000 hours were worked without a lost workday or skin contamination, and at a lower dose rate than expected. The footprint area of the reactor was reduced by 81%.

As a result of the success of C-Reactor, supplemental funding was awarded in FY98 to start F- and DR-Reactors. Many of the technologies were moved directly to these reactors. In FY99, additional funding will be received to keep us going.

Closing Remarks

- The success of this project was a direct result of the partnering of EM-40 and EM-50.
- This project was necessary to meet Hanford objectives, TPA milestones, and Hanford STCG Management Council needs.
- Stakeholders strongly support this project and the continuation of Reactor Interim Safe Storage (ISS).
- Congress has allocated additional FY98 and FY99 funds to support the continuation of Reactor ISS, directly attributable to the success of this project.

Questions/Comments:

John Murphy asked if they have a life-cycle cost (LCC) savings estimate available and, if so, how is it validated. Shannon said that they have a LCC estimate for each individual technology, but not for the total project. The Corps of Engineers did the cost analysis.

Doug Huston asked how the STCG fit into all the technology deployments. Shannon said that the STCG initially endorsed the C-Reactor Large-Scale Demonstration, and each technology was brought to the D&D Subgroup for review and endorsement.

Endorsement of HTI:

Debbie suggested addressing the letter more broadly than to John Wagoner (e.g., “to whom it may concern”). Then the vote was taken.

VOTE: Should the STCG Management Council send a letter of endorsement on HTI?

Yes:	9
No:	0
Abstain:	0

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